



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,136	12/08/1998	DARRYN MCDADE	97-S-159	6383

30425 7590 07/27/2005
STMICROELECTRONICS, INC.
MAIL STATION 2346
1310 ELECTRONICS DRIVE
CARROLLTON, TX 75006

EXAMINER

NGUYEN, HUY THANH

ART UNIT PAPER NUMBER

2616

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/207,136

Applicant(s)

MCDADE ET AL.

Examiner

HUY T. NGUYEN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-20, 25-27 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-20, 25-27 and 31-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 March 2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 5-6, 8, 14-17, 20, 25-26, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al (5,982,979) in view of Sawabe et al (5,933,569), Kolluru (6,128,597) and Fandrianto et al (5,982,459).

Regarding claims 1, 20 and 25, Omata et al discloses a file reader capable of obtaining any of one or more encoded audio/video data streams from a data source utilizing a file system (col. 2, lines 52-57); a file navigator enabling selection of a particular file on the data source and instructing a file reader to obtain a selected encoded audio/video data stream from the data source (col. 3, line 26 - col. 4, line 57). However, Omata et al does not disclose a splitter and a reprogrammable proxy filter.

Sawabe et al teaches a splitter separating the encoded AN data stream into one or more component data streams; and a reprogrammable proxy filter decoding and converting the one or more component data streams into three or more renderable signals including at least one audio signal and at least two video signals (87-95, fig. 16).

It would have been highly desirable to have a reprogrammable proxy filter so that the video data could have audio and sub-picture data related to the video included on the storage medium. The addition of audio and sub-picture to video allows the user to gather more information on the events shown in the video. It would have been highly desirable to have a splitter separating the AN data stream so that the data is sent to the corresponding decoder. For example, a video decoder cannot decode audio data.

Art Unit: 2616

Therefore, if the audio data is not separated from the video data it cannot be decoded because it would have been sent to the video decoder.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a splitter and a reprogrammable proxy filter in the device of Omata et al.

Further for claim 20, Omata et al discloses a file reader capable of obtaining any of one or more encoded audio/video data streams from a data source utilizing a file system; and a navigator enabling selection of a particular file on the data source and instructing the file reader to obtain a selected encoded audio/video data stream from the data source (col. 3, line 26 - col. 4, line 57). Sawabe et al teaches a user interface connected to the navigator and having one or more predefined functions for selection an encoded audio/video data stream to be obtained (98); a splitter (86), the navigator (100) being coupled to the splitter (80) such that the navigator can use the navigation data stream to select the encoded AN data stream to be obtained; an audio filter (93); a video filter (88); a subpicture filter (90); a mixer (91); a synchronizing filter, an audio renderer, and a video renderer (col. 17, lines 30-64)..

Further for claim 25, Omata et al discloses a file reader and a navigator (col. 3, line 26 - col. 4, line 57). Sawabe et al teaches a DVD drive (fig. 16); a splitter (86); a reprogrammable proxy filter (87-95); and a mixer combining the at least two video signals (91). The audio and video renderer were discussed in the art rejection of claim 17; and enabling the selection of a particular file on the data source was discussed in the art rejection of claim 1. Please refer to the art rejection of claims 1 and 17.

Omata as modified with Sawabe fails to teach using a reprogrammable video decoder for decoding the video data .

Fandrianto teaches using a reprogrammable decoder using decoding instruction program to decode video information (column 12, lines 48- 56).

It would have been obvious to one of ordinary skill in the art to modify Omata as modified with Sawabe with Fandrianto by using a reprogrammable video decoder as taught by Fandrianto for decoding the video data thereby enhancing the decoding capacity of the audio/video system.

Omata as modified with Sawabe fails to teach using a reprogrammable audio decoder for decoding the audio data ..

Kolluru teaches a reproducing apparatus having a reprogrammable audio decoder for decoding the audio information.

It would have been obvious to one of ordinary skill in the art to modify Omata as modified with Sawabe with Kolluru by using a reprogrammable audio decoder as taught by Kolluru for decoding the audio data thereby enhancing the decoding capacity of the audio/video system.

Regarding claim 2, Omata et al does not explicitly disclose a user interface connected to the file navigator for selecting a file containing the encoded AN data stream to be obtained. However, Omata et al discloses that the user may select the AV signal to be obtained (col. 43, lines 27-39). If the user can select an AV signal the device must inherently have a user interface.

Regarding claim 3, Omata et al does not disclose that the user interface comprises more than one predefined function for selecting an AV signal to be obtained

Sawabe et al teaches that the user interface comprises more than one predefined function for selecting an AV signal to be obtained (fig. 17, i.e. parental control).

It would have been highly desirable to have a user interface with more than one predefined function for selection an AV signal so that a plurality of parental levels could be selected.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have more than one predefined function in the device of Omata et al.

Regarding claim 5, Omata et al discloses a video stream (fig. 5). However, Omata et al does not disclose an audio data stream a sub-picture data stream, and a navigation data stream.

Sawabe et al discloses an audio data stream (93, fig. 16), a video data stream (88), a sub-picture data stream (90), and a navigation data stream (95).

It would have been highly desirable to have an audio data stream, sub-picture data stream, and navigation data stream so that additional data corresponding to the video data is included.

Therefore, it would have been highly desirable to a person of ordinary skill in the art at the time of the invention to have an audio data stream, sub-picture data stream, and navigation data stream in the device of Omata et al.

Art Unit: 2616

Regarding claim 6, Omata et al discloses selecting the file containing the encoded AN data stream to be obtained according to one or more selection signals received from the user interface (please refer to the art rejection of claim 2). However, Omata et al does not disclose a file navigator coupled to the splitter that can use the navigation data stream.

Sawabe et al teaches that the file navigator is coupled to the splitter (86) such that the file navigator (100, fig. 16) can use the navigation data stream to select the file.

It would have been highly desirable to have the file navigator coupled to the splitter so that the navigation data can be used to select a desired stream (col. 16, line 57 - col. 17, line 7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have the file navigator coupled to the splitter in the device of Omata et al.

Regarding claim 8, Omata et al does not disclose MPEG data.

Sawabe et al teaches that the reprogrammable proxy filter can decode and convert a component data stream that conforms to a MPEG coding standard (col. 7, lines 13-20). Note that the claim only requires "one or more of the coding standards to be met.

It would have been highly desirable to have MPEG data because MPEG is a common standard used and the device would thereby provide video data that is compatible with various devices.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have MPEG data in the device of Omata et al.

Regarding claims 14-16, Omata et al does not disclose a renderable audio signal; a renderable sub-picture signal; a mixer; and a reprogrammable proxy filter for synchronizing the signals.

Sawabe et al teaches a renderable audio signal (Sadd, fig. 16); a renderable video signal (S_vd); a renderable sub-picture signal (Sspd); a mixer for combining the sub-picture signal with the video signal and producing a combined signal (91, fig. 16); a reprogrammable proxy filter comprising a function for synchronizing the three or more renderable signals (col. 17, lines 30-64).

It would have been highly desirable to have a mixer so that sub-picture data (i.e. titles, sub-titles, etc.) are combined with the video signal. It would have been highly desirable to synchronize the signal so that audio and sub-picture data are correctly presented with the video data.

Therefore, it would have been obvious to a person of ordinary skill at the time of the invention to have a mixer and reprogrammable proxy filter in the device of Omata et al.

Regarding claim 17, Omata et al does not disclose an audio renderer and a video renderer.

Sawabe et al teaches an audio renderer (93) coupled to the reprogrammable proxy filter and an audio application program interface (internal hardware or software controlling audio decoding in the audio decoder), the audio renderer controlling the

Art Unit: 2616

manipulation and rendering of an audio signal from the three or more renderable signals (col.17, lines 30-64); and a video renderer (88) coupled to the reprogrammable proxy filter and a video application program interface (internal hardware or software controlling video decoding in the video decoder), the video renderer controlling the manipulation and rendering of a video signal from the three or more renderable signals (col. 17, lines 30-64).

It would have been highly desirable to have an audio renderer and a video renderer so that the video data could be presented with audio data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have an audio renderer and a video renderer in the device of Omata et al.

The limitations of claim 26 where discussed in the art rejection of claim 2. Please refer to the art rejection of claim 2.

The limitations of claim 32 where discussed in the art rejection of claim 16. Please refer to the art rejection of claim 16.

4. Claims 4, 19, and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al and Kolluru (6,128,597) and Fandrianto et al (5,982,459) as applied to claims 1,3,17 and 25-26 further in view of Nakai et al (5,999 698)

Regarding claim 4 and 27, Omata et al does not disclose predefined functions including play, pause, menu, stop, previous, and next.

Nakai et al teaches a user interface selecting the AV signal to be obtained using the predefined functions play (5c), pause (5d), menu (5n), previous (5f), and next (5f) in figure 8.

It would have been highly desirable to predefine functions (i.e. play, pause, menu, previous, and next) supported by a user interface so that the user has a plurality of options for controlling the device.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have play, pause, menu, previous, and next functions on a user interface in the device of Omata et al.

Regarding claim 19, Omata et al does not disclose a DVD device driver; and a DVD drive, wherein the file reader accesses the DVD through the DVD device driver and DVD drive.

Nakai et al teaches that the data source is a DVD; a DVD device driver (50, fig. 1); and a DVD drive (30), wherein the file reader accesses the DVD through the DVD device driver and DVD drive.

It would have been highly desirable to have a DVD device driver and a DVD drive so that the decoder is able to access data stored on a DVD.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a DVD device driver and a DVD drive in the device of Omata et al.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al, Kolluru (6,128,597) and Fandrianto et al (5,982,459) as applied to claim 1 above , further in view of Zdepski et al (5,825,884).

Regarding claim 7, Omata et al does not disclose an audio decoder, video decoder, sub-picture decoder, wherein each of the decoders may be selectively updated or replaced.

Sawabe et al teaches an audio decoder (93, fig. 16); a video decoder (88); and a sub-picture decoder (90).

Zdepski et al teaches updating the software for a decoder (col. 3, line 62 - col. 4, line 2). Therefore, it would have been obvious to update or replace any one of the decoding software.

It would have been highly desirable to have an audio, video, and sub-picture decoder so that the video is reproduced with accompanying audio and sub-picture data. It would have been highly desirable to update software so that improvements could be implemented.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have an audio, video, and sub-picture decoder; and to update a software decoder in the device of Omata et al.

Art Unit: 2616

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al Kolluru (6,128,597) and Fandrianto et al (5,982,459) as applied to claim 1 above , further in view of Heo et al (5,987,417).

Regarding claim 11, Omata et al does not disclose decoding and converting a component data stream that conforms to a Dolby AC-3 coding standard; and decoding and converting a component data stream that conforms to a PCM coding standard.

Heo et al teaches decoding and converting a component data stream that conforms to a Dolby AC-3 standard and a PCM standard (col. 22, lines 55-65). Therefore, Heo et al teaches using one or more decoding standards to decode and convert the one or more component data streams.

It would have been highly desirable to decode and convert data conforming to the Dolby AC-3 standard and a PCM standard, since A/V data is commonly stored according to the standards on DVDs.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to decode and convert data conforming to the Dolby AC-3 standard and the PCM standard in the device of Omata et al.

7. Claims 12-13, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al, Kolluru (6,128,597) , Fandrianto et al (5,982,459) and Heo et al as applied to claims 11 and 25 above , further in view of Zdepski et al (5,825,884).

Regarding claims 12-13 and 31, Omata et al does not disclose that one or more decoding standards can be added or upgraded via software.

Heo et al teaches using one or more decoding standards to decode and convert the one or more component data streams, as discussed in the art rejection of claim 11.

Zdepski et al discloses updating the software for a decoder (col. 3, line 62 - col. 4, line 2). Therefore, it would have been obvious to update or replace any one of the decoding software.

It would have been highly desirable to upgrade or add new software so that the decoder can decode changed or new formats. For example, MPEG-1 was replaced by a new format MPEG-2. The software for decoding MPEG-1 could be updated or new software could be added to the CPU to allow decoding of MPEG-2.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to allow decoding standards to be upgraded or added via software in the device of Omata et al.

8. Claims 18 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al Kolluru (6,128,597) and Fandrianto et al (5,982,459) as applied to claims 18 and 25 above , further in view of Baumgartner et al (5,642,171).

Regarding claims 18 and 33, Omata et al does not disclose a sound card; an audio driver; a video graphics adapter; and a video driver.

Baumgartner et al teaches a sound card; an audio driver; a video graphics adapter; and a video driver (col. 1, lines 31-53 and col. 10, lines 40-64).

It would have been highly desirable to have a sound card; an audio driver; a video graphics adapter; and a video driver so that a DVD could be reproduced using a personal computer.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a sound card; an audio driver; a video graphics adapter; and a video driver in the device of Omata et al.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


HUY T. NGUYEN
PRIMARY EXAMINER